# Construction Project Briefing

**February 5, 2014** 



#### **Today's Presentation**

- Traction Power Farwell/Armitage/Hill Substations
- Bus Hoist Replacement Program
  - **✓** Phase 1 Forest Glen, South Shops, 77<sup>th</sup> Street Bus Garage
  - **✓** Phase 2 Kedzie Bus Garage
  - **✓** Phase 2 North Park Garage
  - **✓** Phase 2 Chicago and 103<sup>rd</sup> Garage



Justification of Need:	Substation equipment is obsolete and has exceeded its current lifespan
Priority of Project:	High
Total Project Budget:	\$56,918,563.00
Construction Contract Value:	\$46,684,000.00
Earned to Date:	27%
Percent Change Orders to Construction Contract:	0%
Percent Time Used to Date:	59%
Funding Source:	State Capital Program
Estimated Start Date/Estimated Length of Project:	NTP issued September 30, 2012
Designer of Record:	Laramore, Douglass and Popham (LDP)
Construction Manager/General Contractor:	STV (CM), F.H. Paschen (GC)
Project Manager:	Barney Gray (GM); Premal Vora (PM)

#### **Detailed Overview of Scope:**

Construct Three (3) New Traction Power Substations namely, Farwell, Armitage, Hill

Modify Orleans Switch Room Modify Weed Switch Room Modify Sedgwick Substation



Impact on Customers:	Nine single tracks, and six reroutes. Street and lane closures around worksites, curtailed access to resident garages (at Armitage).
Benefit to System:	Additional traction power capacity reduced traction power related train defects, improved reliability for revenue service, and improved safety.
Benefit to Community:	Improved safety.
Impact on Accessibility:	None.
Estimated # of Jobs Created:	89
Customer Communication Need:	Construction activity notices will be needed to alert businesses and residents to weekend, night work and power outages.

Comparable	Projects:
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NA



#### **Construction Progress**

Phase	Description	Status
Construction	<ul> <li>Farwell – Work is continuing with masonry and site utilities. The interior work is proceeding dielectric flooring installation. Equipment testing, followed by delivery and installation, is scheduled for the first quarter of the year.</li> </ul>	Ongoing
	<ul> <li>Armitage – CTA track column replacement work continues with earth retention installation, excavation, lagging and bracing installation followed by temporary shoring in order to remove and replace twenty-seven column foundations. Initial drilling and H-Pile installation has revealed unknown existing conditions that requires the contractor to re- sequence the work, but has not stopped progress at the site.</li> </ul>	
	<ul> <li>Hill – Masonry work has progressed with the concrete block 1<sup>st</sup> floor structural wall installation. The masonry work will continue with the façade brick and stone finishes. While the building is progressing, site work will also be completed for utilities. The precast roof plank installation has completed. The ductbank work will continue with earth retention installation and excavation, followed by conduit installation.</li> </ul>	

#### **Delay Explanation:**

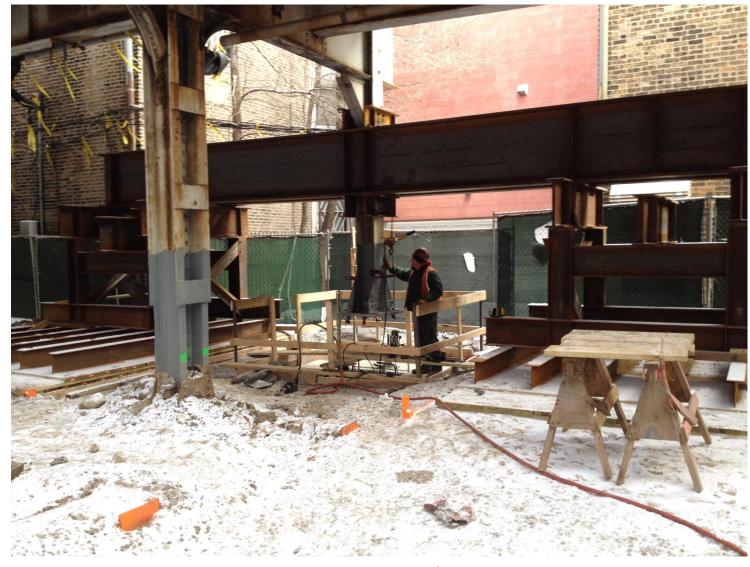
- Unforeseen underground conditions have been encountered within CTA Right of Way at Armitage Substation.
- High water table on site at Armitage caused CDOT to request a site dewatering plan for future excavation work.





**Farwell Substation: masonry installation** 









Hill Substation: H-pile installation for ductbank



Justification of Need:	The existing bus hoists are beyond their useful life and many are not functioning.:			
Priority of Project:	High			
Construction Phase	Phase 1: 77 <sup>th</sup> /SS/ Forest Glen	Phase 2: Kedzie	Phase 2: North Park	Phase 2: Chicago/103 <sup>rd</sup>
Bus Hoist Equipment Contract Value:	\$1,668,052	\$1,163,892	\$779,769	\$1,066,901
Construction Contract Value:	\$2,663,345	\$3,145,143	\$1,869,630	\$2,820,651
Value Earned to Date (Construction and Hoists):	\$4,288,084	\$4,227,808.00	\$2,251,989	\$452,843
Percent Change Orders to Construction Contract:	25%	0%	0%	0%
Percent Time Used to Date:	99%	99%	79%	20%
Estimated Start and Completion Date:	NTP 11/21/12 Projected completion 10/18/13.	NTP 3/4/13 Projected completion 12/20/13.	NTP 6/24/13 Projected completion 3/05/14.	NTP 9/10/13 Projected completion 7/09/14.
Designer of Record:	TranSystems Corporation			
Contractor	Paul Borg	Kiewit	F.H. Paschen	F.H. Paschen
Project Manager:	Steve Mascheri (GM); Shawn Riley (PM); Jacobs (CM)			
Funding Source:	FTA and RTA Grants			

#### **Detailed Overview of Scope:**

 $Replacement\ of\ bus\ maintenance\ lifts\ including\ drainage,\ electrical\ work,\ and\ maintenance\ pads.$ 

Project has been sequenced to mitigate interference to CTA Bus Operations.



Impact on Customers:	N/A
Benefit to System:	Improved capacity for maintenance facilities and reliable equipment for bus operations.
Benefit to Community:	N/A
Impact on Accessibility:	N/A
Estimated # of Jobs Created:	80 (phases 1 thru 4)
Customer Communication Need:	N/A

#### **Comparable Projects:**

N/A



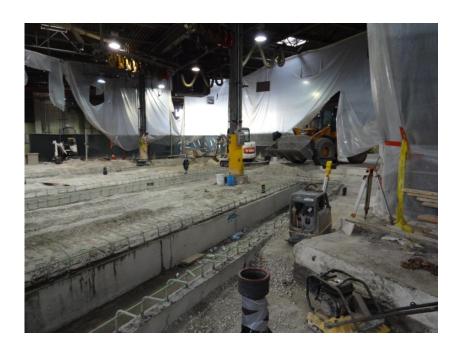
#### **Construction Progress**

Phase	Description	Status
Phase 1:	■ Forest Glen – Close out in progress.	Closeout
	South Shops – Close out in progress.	
	■ 77 <sup>th</sup> Garage –Close out in progress.	
Phase 2:	<ul> <li>Kedzie Garage – 12 lifts total: 12 lifts installed. Punch list and substantial completion have been issued.</li> </ul>	Punch List
	<ul> <li>North Park Garage – 13 lifts total: 9 lifts installed. Phase 3 started on 12.16.13 for remaining 4 lifts.</li> </ul>	Construction
	<ul> <li>103<sup>rd</sup> and Chicago Garages – NTP issued 9/10/13. Chicago Garage – Phase 1 scheduled to be complete by February 2014. 103<sup>rd</sup> Garage – Phase 1 scheduled to be complete by March 2014.</li> </ul>	Construction

#### **Delay Explanation:**

Phase 1: Due to the elevation of the existing drainage lines they could not be reused and new lines needed to be installed.

Phase 2: Equipment installation dates were extended to better accommodate installation of hoists and minimize impact to bus operations.



Chicago- Bays 1-3 pits and backfill



**Chicago- Access boxes and utilities** 





103<sup>rd</sup>- Excavation



North Park Annex –Excavation/IDW install

